## **ABSTRACT**

The Case for Periodic Reinvestigation of Threats for Mission Data Optimizations

by

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Periodic revisitations of older, yet highly deployed threat systems is necessary to keep combat platforms on the cutting edge of electronic countermeasures (ECM), maximizing combat survivability through optimized ECM effectiveness. This presentation focuses on how:

- Increases in threat knowledge over time requires a revisitation of mission data (MD) optimizations
- Technology advances allow greater insights into processes of threats previously optimized against
- Improved analysis methods focus a MD optimization effort quickly toward areas of promise

Responsiveness is a key Air Power capability inherent in the process of MD development for ECM. Within the realm of electronic warfare (EW), non-emergency responsiveness typically is not present in revisiting radio frequency (RF) threats optimized against several years ago. With the wide proliferation and advancements made on older RF threats, MD revisitation makes good operational sense. These considerations will be presented in the light of recent MD optimization efforts against three well-known threat systems. Results of the optimizations will be presented with emphasis on how the three issues above, when acted upon, translated into significantly increased combat ECM effectiveness capabilities on several Combat Air Forces (CAF) platforms. The classification of this presentation is SECRET/NOFORN. The presentation is applicable to the session entitled "Countering RF Missile Threats".

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